REMARKS

Applicants have studied the Office Action dated January 9, 2006. No new matter has been added. It is submitted that the application is in condition for allowance. Applicants have amended Claims 1, 4, 5, 8, 12 and 16. By virtue of this amendment, claims 1-17 are pending. Reconsideration and further examination of the pending claims in view of the above amendments and the following remarks is respectfully requested. In the Office Action, the Examiner:

- Rejected claims 1-10, 12, and 14-17 under 35 U.S.C. §103(a) as being unpatentable over Mancusi et al. (U.S. Patent No. 6,275,864) and Sakai et al. (U.S. Patent No. 6,005,869); and
- Rejected claims 11 and 13 under 35 U.S.C. 103(a) as being unpatentable over Sakai et al. (U.S. Patent No. 6,005,869) and Mancusi et al. (U.S. Patent No. 6,275,864) as applied to claims 9 and 10 above, and further in view of Stallmo et al. (U.S. Patent No. 5,689,678).

Overview of the present invention

In a typical business environment, many offices are connected together so that computers, printers, and associated equipment can communicate together. This configuration is known as a LAN (Local Area Network). There are two widely used types of LAN networks: Ethernet Nework (IEEE 802.3) and Token Ring (IEEE 802.5). The Ethernet network is more widely used because typically it is less expensive. However, if several communication devices contend for communication at the same time, bottlenecks occur during which all devices except one must "Backoff" or hold-off communicating until this one device completes the communication. After this, another device starts communicating until all devices are complete. This is a problem with "simultaneous" communications. In an Ethernet network topology, the aggregated bandwidth of the network cannot approach the incremental bandwidth due to the lack of controlled loading. In contrast to an Ethernet network topology, a Token Ring allows for

PAGE 12/28 * RCVD AT 4/10/2006 5:47:12 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-2/8 * DNIS:2738300 * CSID:561 989 9812 * DURATION (mm-ss):10-58

controlled loading. As the name implies, a Token Ring network is based on token passing for higher shared bandwidth and avoids collisions based on the control of the tokens. Although both are useful, these LAN standards of Ethernet network and Token Ring network are not without their shortcomings. One shortcoming is that both Ethernet and Token Ring networks do not allow for simultaneous communications.

To provide simultaneous communications, the present invention couples at least one slave agent with at least two master agents, including a first master agent and a second master agent on a closed loop bus in a ring network. The present invention determines if there is data from at least one master agent. If there is data from at least one master agent, the data from the bus is tested to determine if it is a token, wherein the token is used for complete roundtrip communication transactions so as to avoid deadlock on the closed loop bus. In response to the data from the bus being a token, the data is moved from the at least one master agent to the bus and the token is discarded from the bus. In the response to the data not being a token from the bus, the data is moved from the input of the bus to the output of the bus. In response to the data not being from the at least one master agent and the data is from the bus, the data is moved from the input of the bus to the output of the bus.

Rejection under 35 U.S.C. §103(a) as being unpatentable over Mancusi and Sakai

As noted above, the Examiner rejected claims 1-10, 12, and 14-17 under 35 U.S.C. §103(a) as being unpatentable over Mancusi et al. (U.S. Patent No. 6,275,864) and Sakai et al. (U.S. Patent No. 6,005,869). Specifically, Sakai is silent on (emphasis added):

> coupling at least one slave agent with at least two master agents including a first master agent and a second master agent on a closed loop bus in a ring network for simultaneous communications, wherein the

PAGE 13/28 * RCVD AT 4/10/2006 5:47:12 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-2/8 * DNIS:2738300 * CSID:561 989 9812 * DURATION (mm-ss):10-58

simultaneous communications on the bus permits two or more of the master agents and the slave agent on the bus to communicate at one time independent of a clock signal;

[...]

testing if the data from the closed loop bus is a token, wherein the token is used for complete roundtrip communication transactions so as to avoid deadlock on the closed loop bus;

[...]

With respect to claims 1 and 17 and similarly claim 9, the Examiner asserts that Sakai teaches "a method for simultaneous communication over a closed loop bus" and cites Sakai at col. 29, lines 38-49 in support thereof.

However, the Applicants respectfully disagree. The Applicants would like to clearly point out that Sakai **does not** teach simultaneous communications "wherein the simultaneous communications on the bus permits two or more of the master agents and the slave agent on the bus to communicate at one time independent of a clock signal". Simultaneous communication, as defined by the present invention at page 7, lines 9-14 of the Specification as originally filed, is communication that occurs between two or more agents (two or more masters, two or more slaves, or a combination of both masters and slaves) that are coupled to the bus so that a request and reply is accomplished in one round-trip or cycle of the bus. Nowhere does Sakai teach this. In fact, Sakai only teaches a single master (col. 1, lines 5-7, col. 3, line 38, and in the claims) and not two masters simultaneously communicating on the bus. For example, Sakai teaches that a slave can request data from another slave. The requesting slave transmits a token authorizing another slave to transmit data. Each slave analyzes the packet to determine if the token was addressed to it. The authorizing token then returns to the originator (the token is then deleted). The authorized slave waits a certain period

PAGE 14/28 * RCVD AT 4/10/2006 5:47:12 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-2/8 * DNIS:2738300 * CSID:561 989 9812 * DURATION (mm-ss):10-58

of time after receiving authorization and transmits a data packet onto the bus for receipt by the requesting slave. See Sakai at col., 20, lines 7-67 to col. 21, lines 1-40. In the present invention, the number of tokens that can be on the bus at one time is one less than the total number of agents.

When a master has a request, a token is taken off the bus and the request is transmitted to the intended slave. The slave transmits its request onto the bus where the master receives it. The master does not put the token back on the bus until the response is received from the slave. This can be done for each token on the ring. Accordingly, the presently claimed invention distinguishes over Sakai for at least these reasons.

The Examiner further concluded that Sakai teaches

> testing if the data from the closed loop bus is a token, wherein the token is used for complete roundtrip communication transactions so as to avoid deadlock on the closed loop bus

and cited Sakai at col. 4, lines 18-45 in support thereof. However, neither here nor anywhere else in Sakai does Sakai teach "testing if the data from the closed loop bus is a token, wherein the token is used for complete roundtrip communication transactions so as to avoid deadlock on the closed loop bus". In fact, Sakai is completely silent on using tokens to avoid deadlock. For example, to initialize the slaves, Sakai sends out a token on the bus to a first slave. The first slave accepts the token. After a time interval has passed without receiving the token back, the master sends out another token. The next slave accepts that token and after a time interval has passed without receiving the token back, the master sends out another token. If all of the slaves have accepted tokens, the last token sent by the master will make its way back to the master. The master then knows that each slave has received a token.

PAGE 15/28 * RCVD AT 4/10/2006 5:47:12 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-2/8 * DNIS:2738300 * CSID:561 989 9812 * DURATION (mm-ss):10-58

The present invention, on the other hand, can have a plurality of tokens on the bus at any given time. The maximum number of tokens is one less than the total number of masters and slaves. Because only a master can request information, only the master can take a token off the ring. The master sends its request to a slave who then receives the request and places its response on the ring without waiting for a token. The master receives the response and places the token it was holding back on the ring. In this way, deadlocks are avoided. Nowhere does Sakai teach this. Accordingly, the presently claimed invention distinguishes over Sakai for at least these reasons as well.

The Examiner also concluded that Sakai teaches the following claim elements of the presently claimed invention:

> in response to the data from the closed loop bus being a token, then moving the data from the at least one of the master agents to the closed loop bus and discarding the token from the closed loop bus; and
>
> in response to the data not being a token from the closed loop bus, then moving the data from the input of the closed loop bus to the output of the closed loop bus;
>
> wherein, in response to the data not being from the at least one of the master agents and the data is from the closed loop bus, then moving the data from the input of the closed loop bus to the output of the closed loop bus

and cites col. 17, lines 30-38; col. 13, lines 19-36; and col. 13, line 47 to col. 14, lines 6 in support thereof.

PAGE 16/28 * RCVD AT 4/10/2006 5:47:12 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-2/8 * DNIS:2738300 * CSID:561 989 9812 * DURATION (mm-ss):10-58

As stated in the previous Responses With Amendment dated October 10, 2005 and July 20, 2005, Sakai discloses a communication network, including a single master station and a plurality of slave stations. See Sakai at col. 1, lines 5-7. The master station sends out three types of tokens onto a ring-shaped bus. The three tokens consist of an asynchronous token, an isochronous token, and a null token. See Sakai at col. 12, lines 1-15. Sakai teaches entering into an initialization state where the master sends out initialization mode packets (IM) onto the ring-shaped bus to slave stations on the bus. Each station can connect or disconnect the flow of data through the ring-shaped bus by opening or closing a switch within the station. After the master station knows how many slaves there are, it sends out asynchronous token packets to obtain and confirm actual ID addresses for each of the slaves. Each slave checks to see whether the token information coincides with its own information and, if it does, the station generates an asynchronous data packet with actual ID information. Once the token leaves the slave, the slave outputs the data packet onto the ring. When the master receives a token back, it analyzes the token to determine if a data packet is being sent to the master. The master then deletes and discards the received token. The master transmits another token when it receives a previously transmitted token back. This process is continued until all actual IDs are obtained and confirmed.

After the actual IDs are obtained and confirmed, Sakai teaches entering into a steady state to enable isochronous data communication. Sakai teaches that the master sends out an asynchronous token packet when the steady state is entered. Every time a certain time passes after sending out the asynchronous token, the master sends out an isochronous token. When a slave station receives an isochronous token designated for that slave, it knows that it is authorized to send isochronous data. The slave waits for a packet informing this sending slave that the slave, which is intended to receive the isochronous data, is in a receiving state. The sending slave then sends the isochronous data onto the ring.

In contrast, the presently claimed invention recites "coupling at least one slave agent

PAGE 17/28 * RCVD AT 4/10/2006 5:47:12 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-2/8 * DNIS:2738300 * CSID:561 989 9812 * DURATION (mm-ss):10-58

with at least two master agents, including a first master agent and a second master agent on a closed loop bus in a ring network for simultaneous communications, wherein the simultaneous communications on the bus permits two or more of the master agents and the slave agent on the bus to communicate at one time independent of a clock signal". The simultaneous communication of the presently claimed invention is independent of any clock function. The present invention further recites "wherein the token is used for complete roundtrip communication transactions so as to avoid deadlock on the closed loop bus". In fact, Sakai does not teach this, as previously stated in the Responses With Amendment dated October 10, 2005 and July 20, 2005. Sakai teaches that initialization mode packets are first sent out on the bus to the slaves before any tokens are sent. The tokens in the initialization state of Sakai are used by the single master to obtain and confirm the actual IDs of the slave agents. Also, Sakai teaches that slaves cannot transfer data onto the ring until it receives a token authorizing it to do so. For example, for a slave in Sakai to be able to output asynchronous or isochronous data onto the ring, the slave has to first receive an asynchronous or isochronous token. See, for example Sakai at col. 4, lines 65-67 to col. 5, lines1-8; col. 15, lines 60-62; and col. 28, lines 5-14.

In the present invention, as illustrated by the hopper car analogy in the Response With Amendment dated July 2, 2005, there can be n-1 tokens on the ring at all times, where n is the number of agents and therefore, there can be n-1 requests/responses on the ring at the same time. In the present invention, all n-1 tokens are initially on the ring simultaneously. A slave does not need to wait to receive a token before generating a response to a master agent's request. See the Specification as originally filed at page 8, lines 1-11. Nowhere does Sakai teach using a token for complete roundtrip communication transactions so as to avoid deadlock on the closed loop bus.

Therefore, Sakai does not teach, suggest, or anticipate "coupling at least one slave agent with at least two master agents including a first master agent and a second master agent on a closed loop bus in a ring network for simultaneous communications,

PAGE 18/28 * RCVD AT 4/10/2006 5:47:12 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-2/8 * DNIS:2738300 * CSID:561 989 9812 * DURATION (mm-ss):10-58

wherein the simultaneous communications on the bus permits two or more of the master agents and the slave agent on the bus to communicate at one time independent of a clock signal; ... testing if the data from the closed loop bus is a token, wherein the token is used for complete roundtrip communication transactions so as to avoid deadlock on the closed loop bus..." as recited for independent claims 1 and 17 and similarly claim 9. Accordingly, claims 1, 9, and 17 distinguish over Sakai for at least these reasons.

With respect to claims 1 and 17, the Examiner correctly acknowledges that Sakai does not teach:

> A method for simultaneous communication over a bus, the method on a first master agent on the bus having an input and an output to the bus, the method on the first master comprising:
>
> coupling at least one slave agent with at least two master agents including a first master agent and a second master agent on a bus;
>
> determining if there is data from at least one of the master agents, and if there is data from the at least one of the master agents

However, the Examiner goes on to combine Sakai with Mancusi to overcome the deficiencies of Sakai.[1] In particular, the Examiner states that:

> it would have been obvious to one having ordinary skill in the art at the time of the invention to modify Sakai et al. to a method on the first master agent comprising: coupling at lest one slave agent with at least two master agents including a first master agent and a second master agent; determining if there is data from at least one of the master agents, and if there is data from the at least one of the master agents in order to generate all the address and control signals (See Mancusi et al., col. 12, line 62-col. 13, lines 4).

PAGE 19/28 * RCVD AT 4/10/2006 5:47:12 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-2/8 * DNIS:2738300 * CSID:561 989 9812 * DURATION (mm-ss):10-58

Macusi teaches a matrix switch for a network management system. Mancusi is not directed towards communication methods, but towards a wire hub for interconnecting a plurality of network components to form a local area network. See Abstract. The Examiner cites Mancusi at FIG. 1, col. 12, lines 62-col. 13, lines 4 in support of the above assertions. FIG. 1 of Mancusi shows a modified ISA bus and col. 12, lines 62-col. 13, line 4 merely states that a modified ISA bus supports "multiple bus masters". The Examiner also cites Mancusi col. 20, lines 50-57, which is an appendix of modified ISA bus signal descriptions. In particular, the Examiner directs the Applicants to AEN, TC, and MASTER_L. AEN is defined as "address enabled. Used by alternate bus masters to indicate a valid bus address". TC is defined as "Terminal Count. Indicates that the current cycle is the last DMA cycle". MASTER_L is defined as "Bus master signal. Used in combination with the bus request signal to indicate as alternate bus master cycle". Mancusi merely mentions that multiple master are supported by the modified ISA bus. Nowhere does Mancusi teach that "coupling at least one slave agent with at least two master agents including a first master agent and a second master agent on a bus; determining if there is data from at least one of the master agents, and if there is data from the at least one of the master agents..." Accordingly, the presently claimed invention distinguishes over Macusi for at least these reasons.

Furthermore, the Applicants would like to remind the Examiner that the claim elements cannot be dissected. The claim elements of "determining if there is data from at least one of the master agents, and if there is data from the at least one of the master agents then performing "needs to be read in light of "testing if the data from the closed loop bus is a token...". The Applicants suggest the Examiner dissected this claim element because of the Examiner's assertion that Sakai teaches "testing if the data from the closed loop bus is a token..." and does not teach "determining if there is data from at least one of the master agents, and if there is data from the at least one of the master agents then performing...". However, dissecting the claim as the Examiner did destroys

[1] The Applicants make no statement as to whether such combination is even proper.

PAGE 20/28 * RCVD AT 4/10/2006 5:47:12 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-2/8 * DNIS:2738300 * CSID:561 989 9812 * DURATION (mm-ss):10-58

the intent of claim, which is improper.

A proper rejection would have considered the claim element of "determining if there is data from at least one of the master agents, and if there is data from the at least one of the master agents then performing: testing if the data from the bus is a token" as a whole. Assuming, arguendo, that Mancusi's teaching of multiple masters being supported by the modified ISA bus read on the presently claimed "determining if there is data from at least one of the master agents", in light of this, Mancusi would need to teach "and if there is data from the at least one of the master agents then performing: testing if the data from the bus is a token". Neither Sakai nor Mancusi teach this. Therefore, the rejection of claims 1 and 17, and similarly claim 9, was improper for the reasons stated above. Furthermore, claims 1 and 17, and similarly claim 9, distinguish over Mancusi for the reasons stated above.

Therefore, Sakai alone or in combination with Mancusi does not teach the presently claimed "coupling at least one slave agent with at least two master agents including a first master agent and a second master agent on a closed loop bus in a ring network for simultaneous communications, wherein the simultaneous communications on the bus permits two or more of the master agents and the slave agent on the bus to communicate at one time independent of a clock signal; determining if there is data from at least one of the master agents, and if there is data from the at least one of the master agents then performing: testing if the data from the closed loop bus is a token, wherein the token is used for complete roundtrip communication transactions so as to avoid deadlock on the closed loop bus; in response to the data from the closed loop bus being a token, then moving the data from the at least one of the master agents to the closed loop bus and discarding the token from the closed loop bus; and in response to the data not being a token from the closed loop bus, then moving the data from the input of the closed loop bus to the output of the closed loop bus; wherein in response to the data not being from the at least one of the master agents and the data is from the closed loop

PAGE 21/28 * RCVD AT 4/10/2006 5:47:12 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-2/8 * DNIS:2738300 * CSID:561 989 9812 * DURATION (mm-ss):10-58

bus, then moving the data from the input of the closed loop bus to the output of the closed loop bus". Accordingly, claims 1, 17, and similarly claim 9, distinguish over Sakai alone or in combination with Mancusi for at least the reasons stated above.

Continuing further, when there is no suggestion or teaching in the prior art for a hub processing unit for "coupling at least one slave agent with at least two master agents including a first master agent and a second master agent on a closed loop bus in a ring network for simultaneous communications, wherein the simultaneous communications on the bus permits two or more of the master agents and the slave agent on the bus to communicate at one time independent of a clock signal; determining if there is data from at least one of the master agents, and if there is data from the at least one of the master agents then performing: testing if the data from the closed loop bus is a token, wherein the token is used for complete roundtrip communication transactions so as to avoid deadlock on the closed loop bus; in response to the data from the closed loop bus being a token, then moving the data from the at least one of the master agents to the closed loop bus and discarding the token from the closed loop bus; and in response to the data not being a token from the closed loop bus, then moving the data from the input of the closed loop bus to the output of the closed loop bus; wherein in response to the data not being from the at least one of the master agents and the data is from the closed loop bus, then moving the data from the input of the closed loop bus to the output of the closed loop bus", the suggestion cannot come from the Applicants' own specification. The Federal Circuit has repeatedly warned against using the Applicant's disclosure as a blueprint to reconstruct the claimed invention out of isolated teachings of the prior art. See MPEP §2143 and Grain Processing Corp. v. American Maize-Products, 840 F.2d 902, 907, 5 USPQ2d 1788 1792 (Fed. Cir. 1988) and In re Fitch, 972 F.2d 160, 12 USPQ2d 1780, 1783-84 (Fed. Cir. 1992).

Moreover, the Federal Circuit has consistently held that when a §103 rejection is based upon a modification of a reference that destroys the intent, purpose, or function of the

PAGE 22/28 * RCVD AT 4/10/2006 5:47:12 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-2/8 * DNIS:2738300 * CSID:561 989 9812 * DURATION (mm-ss):10-58

invention disclosed in the reference, such a proposed modification is not proper and the *prima facie* case of obviousness cannot be properly made. See In re Gordon, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984).

The intent, purpose, and function of Sakai taken alone or in view of Mancusi is a ring-shaped communication network with a single master station and a plurality of slave stations. Sakai begins in an initialization state by first sending initialization mode packets and then sends asynchronous token packets to obtain and confirm actual IDs of slave stations. Sakai then enters into a steady state enabling the transfer of isochronous data. However, the slaves do not transfer data until they receive a token authorizing them to transfer data. The Examiner's characterization of Mancusi of multiple masters would destroy Sakai's intent of a single master. In contrast, the intent of the present invention is coupling at least two master agents with at least one slave agent on a bus, wherein n-1 (n is the number or ring agents) tokens can be on the bus at one time to provide simultaneous communications. A token is used for complete roundtrip communication transactions so as to avoid deadlock on the bus. Accordingly, the combination of Sakai and Mancusi results in an inoperable system. Therefore, the Examiner's case of *"Prima Facie Obviousness"* should be withdrawn.

Furthermore, the Federal Circuit stated in McGinley v. Franklin Sports, Inc., (Fed Cir 2001) that if references taken in combination would produce a "seemingly inoperative device," such references teach away from the combination and thus cannot serve as predicates for a *prima facie* case of obviousness. In re Sponnoble, 405 F.2d 578, 587, 160 USPQ 237, 244 (CCPA 1969) (references teach away from combination if combination produces seemingly inoperative device); see also In re Gordon, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984) (inoperable modification teaches away). Here, Sakai teaches a single master and the Examiner's characterization of Mancusi suggests multiple masters. Therefore, the combination of Sakai with Mancusi to produce the presently claimed invention where at least two master agents are coupled to at least one slave agent on closed loop bus in a ring network for

PAGE 23/28 * RCVD AT 4/10/2006 5:47:12 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-2/8 * DNIS:2738300 * CSID:561 989 9812 * DURATION (mm-ss):10-58

simultaneous communications and wherein a token is for complete roundtrip communication transactions so as to avoid deadlock on the bus, would produce an inoperable device. Accordingly, the combination of Sakai and Mancusi is improper.

Independent claims 5, 8, and 16 similarly recite "coupling at least one slave agent with at least two master agents including a first master agent and a second master agent on a closed loop bus in a ring network for simultaneous communications, wherein the simultaneous communications on the bus permits two or more of the master agents and the slave agent on the bus to communicate at one time independent of a clock signal" and claims 8 and 16 similarly recite "wherein the token is used for complete roundtrip communication transactions so as to avoid deadlock on the closed loop bus" and therefore, distinguish over Sakai alone and/or in combination with Sakai as discussed above for claims 1, 9, and 17.

For the foregoing reasons, independent claims 1, 5, 8-9, 16, and 17 distinguish over Sakai taken alone or in view of Mancusi. Claims 2-4, 6-7, 10, 12, and 14-15 depend from claims 1, 5, and 9 respectively. Since dependent claims recite all of the limitations of the independent claim, it is believed that claims 2-4, 6-7, 10, 12, and 14-15 are also distinguishable from Sakai alone or in view of Mancusi as well and the Examiner's rejection should be withdrawn for independent claims 1, 5, 8-9, 16, and 17 and dependent claims 2-4, 6-7, 10, 12, and 14-15, which withdrawal is respectfully requested.

Rejection under 35 U.S.C. §103(a) in view Sakai et al., Mancusi, and Stallmo et al.

As noted above, the Examiner rejected claims 11 and 13 under 35 U.S.C. 103(a) as being unpatentable over Sakai et al. (U.S. Patent No. 6,005,869) and Mancusi et al. (U.S. Patent No. 6,275,864) as applied to claims 9 and 10 above, and further in view of Stallmo et al. (U.S. Patent No. 5,689,678). With respect to Sakai and Mancusi, the

PAGE 24/28 * RCVD AT 4/10/2006 5:47:12 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-2/8 * DNIS:2738300 * CSID:561 989 9812 * DURATION (mm-ss):10-58

above arguments regarding independent claim 9 are applicable here and will not be repeated.

Further, Sakai alone and/or in combination with Mancusi and/or in combination with Stallmo is completely silent on "coupling at least one slave agent with at least two master agents including a first master agent and a second master agent on a closed loop bus in a ring network for simultaneous communications, wherein the simultaneous communications on the bus permits two or more of the master agents and the slave agent on the bus to communicate at one time independent of a clock signal ...testing if the data from the closed loop bus is a token, wherein the token is used for complete roundtrip communication transactions so as to avoid deadlock on the closed loop bus..." Accordingly, independent claim 9 of the present invention distinguishes over the Sakai, Mancusi, and Stallmo references for at least this reason.

Continuing further, when there is no suggestion or teaching in the prior art for coupling at least one slave agent with at least two master agents including a first master agent and a second master agent on a closed loop bus in a ring network for simultaneous communications, wherein the simultaneous communications on the bus permits two or more of the master agents and the slave agent on the bus to communicate at one time independent of a clock signal...testing if the data from the closed loop bus is a token, wherein the token is used for complete roundtrip communication transactions so as to avoid deadlock on the closed loop bus..." the suggestion cannot come from the Applicants' own specification. The Federal Circuit has repeatedly warned against using the Applicant's disclosure as a blueprint to reconstruct the claimed invention out of isolated teachings of the prior art. See MPEP §2143 and Grain Processing Corp. v. American Maize-Products, 840 F.2d 902, 907, 5 USPQ2d 1788 1792 (Fed. Cir. 1988) and In re Fitch, 972 F.2d 160, 12 USPQ2d 1780, 1783-84 (Fed. Cir. 1992).

Moreover, the Federal Circuit has consistently held that when a §103 rejection is based

PAGE 25/28 * RCVD AT 4/10/2006 5:47:12 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-2/8 * DNIS:2738300 * CSID:561 989 9812 * DURATION (mm-ss):10-58

upon a modification of a reference that destroys the intent, purpose or function of the invention disclosed in the reference, such a proposed modification is not proper and the *prima facie* case of obviousness cannot be properly made. See In re Gordon, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984).

Here, the intent, purpose, and function of Sakai taken alone and/or in view of Mancusi and/or in view of Stallmo is a ring-shaped communication network with a single master station and a plurality of slave stations. Sakai begins in an initialization state by first sending initialization mode packets and then sends asynchronous token packets to obtain and confirm actual IDs of slave stations. Sakai then enters into a steady state enabling the transfer of isochronous data. However, the slaves do not transfer data until they receive a token authorizing them to transfer data. Because the Examiner suggests that Mancusi teaches multiple masters and Stallmo is silent on tokens, this combination as suggested by the Examiner destroys the intent and purpose of Sakai's intent of a single master. In contrast, the intent of the present invention is coupling at least two master agents with at least one slave agent on a bus, wherein n-1 (n is the number or ring agents) tokens can be on the bus at one time to provide simultaneous communications. A token is used for complete roundtrip communication transactions so as to avoid deadlock on the bus. Accordingly, the combination of Sakai, Mancusi, and Stallmo results in an inoperable system. Therefore, the Examiner's case of *"Prima Facie Obviousness"* should be withdrawn.

Furthermore, the Federal Circuit stated in McGinley v. Franklin Sports, Inc., (Fed Cir 2001) that if references taken in combination would produce a "seemingly inoperative device," such references teach away from the combination and thus cannot serve as predicates for a *prima facie* case of obviousness. In re Sponnoble, 405 F.2d 578, 587, 160 USPQ 237, 244 (CCPA 1969) (references teach away from combination if combination produces seemingly inoperative device); see also In re Gordon, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984) (inoperable modification teaches away). Here, Sakai teaches a single master, the Examiner suggests that Mancusi

PAGE 26/28 * RCVD AT 4/10/2006 5:47:12 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-2/8 * DNIS:2738300 * CSID:561 989 9812 * DURATION (mm-ss):10-58

teaches multiple masters, which is incompatible with Sakai, and Stallmo is silent on tokens. Therefore, the combination of Sakai with Mancusi, and Stallmo to produce the present invention where at least two master agents are coupled to at least one slave agent on closed loop bus in a ring network for simultaneous communications and wherein a token is for complete roundtrip communication transactions so as to avoid deadlock on the bus would produce an inoperable device. Accordingly, the combination of Sakai, Mancusi and Stallmo is improper.

For the foregoing reasons, independent claim 9 distinguishes over Sakai taken alone and/or in view of Mancusi and/or in view of Stallmo. Claims 11 and 13 depend from claim 9. Since dependent claims recite all of the limitations of the independent claim, it is believed that claims 11 and 13 are also distinguishable from Sakai taken alone and/or in view of Mancusi and/or in view of Stallmo as well, and the Examiner's rejection should be withdrawn, which withdrawal is respectfully requested.

CONCLUSIONS

The remaining cited references have been reviewed and are not believed to affect the patentability of the claims as previously amended.

Applicants acknowledge the continuing duty of candor and good faith to the disclosure of information known to be material to the examination of this application. In accordance with 37 CFR §§ 1.56, all such information is dutifully made of record.

Applicants respectfully submit that all of the grounds for rejection stated in the Examiner's Office Action have been overcome, and that all claims in the application are allowable. No new matter has been added. It is believed that the application is now in condition for allowance, which allowance is respectfully requested.

PAGE 27/28 * RCVD AT 4/10/2006 5:47:12 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-2/8 * DNIS:2738300 * CSID:561 989 9812 * DURATION (mm-ss):10-58

PLEASE, if for any reason the Examiner finds the application other than in condition for allowance, the Examiner is invited to call either of the undersigned attorneys at (561) 989-9811 should the Examiner believe a telephone interview would advance the prosecution of the application.

Respectfully submitted,

Date: April 10, 2006

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PAGE 28/28 * RCVD AT 4/10/2006 5:47:12 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-2/8 * DNIS:2738300 * CSID:561 989 9812 * DURATION (mm-ss):10-58